

An Inaugural Dissertation on Hemoptysis
For the Degree
Of Doctor of Medicine

Addressed to the Medical Faculty
of the University
of Pennsylvania

By *David March 12 1829*

Henry, Daingerfield Magill
of
Virginia

A.D. 1828...9

The General Assembly of the

State of New York

in Session at Albany

January 1st 1858

Resolved

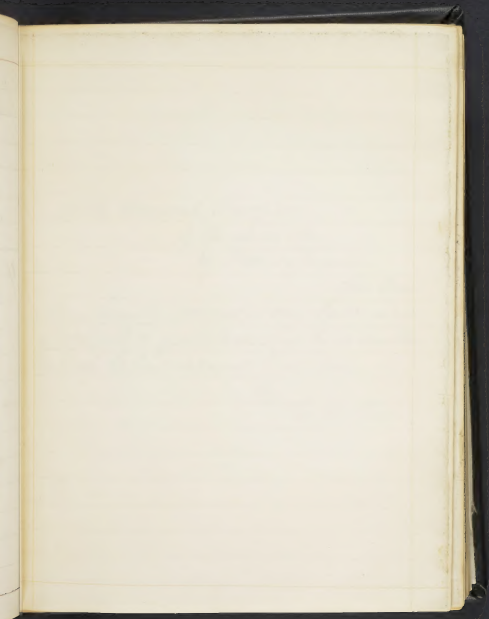
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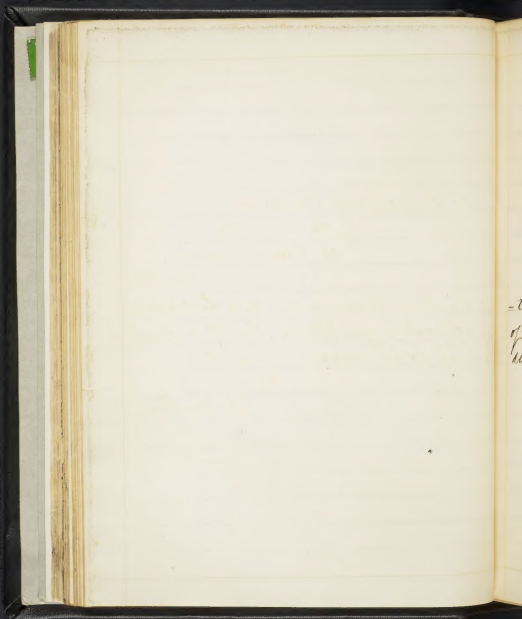
the

Commissioners of the

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do hereby





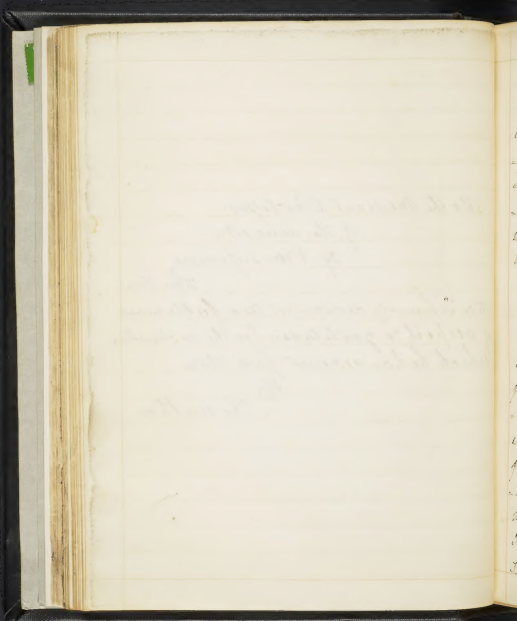
To the Medical Professors
of the University
of Pennsylvania

This Voca-

-ture is humbly dedicated, as a feeble mark
of respect & gratitude; for the instruction
which he has received from them

By

The author



1

Definition -

The term *Hæmoptysis* is derived from two Greek words *aima*. blood & *pteo* to spit, and is a name which is applied to one of the important affections to which our fragile frames are subject. under it is arranged these extravasations of blood ~~which~~ from the throat, the trachea, and the Lungs. It therefore includes three species -

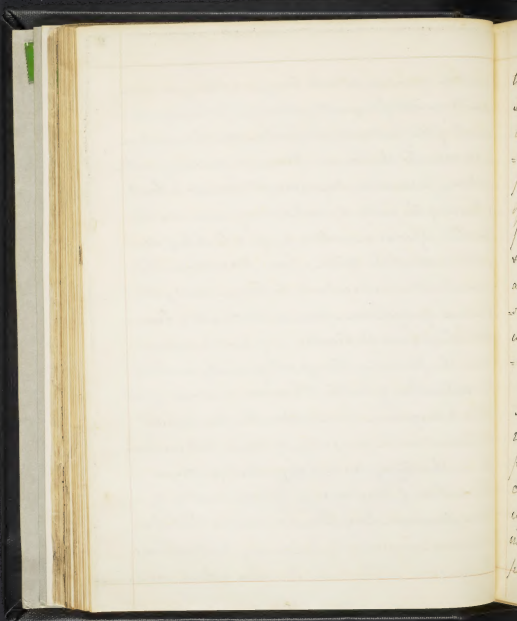
- 1st *Hæmorrhage* from the Fauces.
- 2^d *Hæmorrhage* from the Trachea.
- 3^d *Hæmorrhage* from the Lungs.

These distinctions derive their importance, not only from the influence they have over the medical treatment of the disease, but also from being connected with the cause of humanity; a knowledge of them frequently enabling the physician to remove causing cause from the mind of his patient, & restore him to health & hilarity.

I shall commence with *Hæmorrhage* from the Fauces. This species consists in an oozing of blood from the space

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about the openings into the Larynx & Pharynx, & may be distinguished frequently, merely by opening the mouth of the patient, & inspecting this space, which is denominated the Fauces. It comes on generally without any premonitory signs, except perhaps a heat & tension of the part; it is not accompanied as the two other species are, with a cough & tickling sensation about the glottis; from Hemoptoeis Pulmonalis it is particularly distinguished by the absence of dyspnea, pain in the chest, & fever. Hemorrhage from the Trachea is of more consequence than the preceding, though, not generally involving the destruction of health, it has been casious of but little consequence. Such contempt is perhaps not misplaced in the majority of cases, but we have the authority, of our distinguished professors of the practice of medicine in the University of Pennsylvania, & also of others, for believing that it is sometimes succeeded by pulmonary consumption: the disease state of the Trachea which occasions

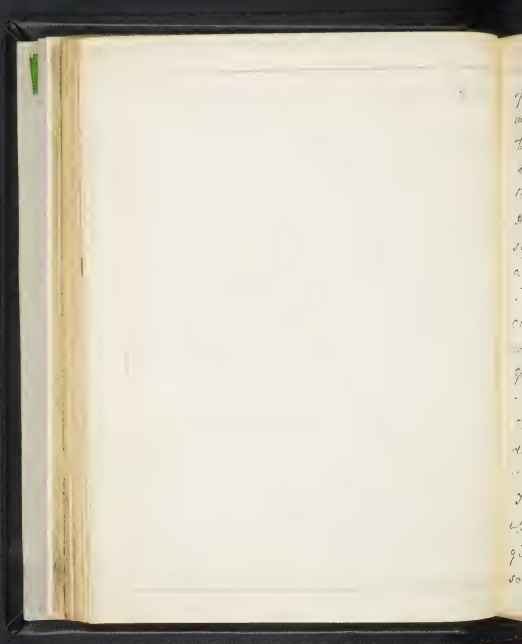


the hæmorrhage seems to extend itself to the
Lungs.

It may be enquired for *Hæmoptoe Pul-*
-monalis, how this is accompanied with some
peculiar symptoms which denote a local
disease, such as a pain in some particular
part of the chest also an oppression or weight
& a sensation as if the same situation there is
a sense of uneasiness about the trachea which con-
stitutes the most decisive diagnosis, and directs
us when I can be more safely to the seat of the dis-
-ease.

Hæmoptoe Pulmonalis

I have now arrived at the consideration of that
extravasation which is the principal object of the
present treatise the two preceding sections scarcely
claiming the notice of the medical Practitioner -
when compared with it. There are few allusions
in the catalogue of diseases, which Haetha-
-liæ mentions, & his relatives more than a dozen

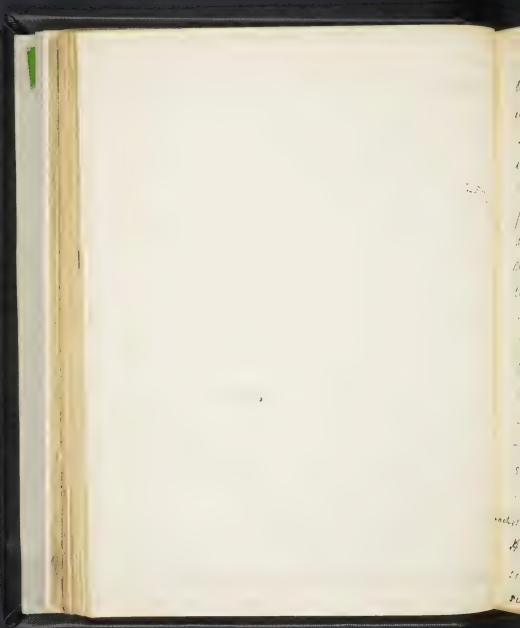


of sanguineous fluid from the mouth the first impression that is made is, that it proceeds from the Lungs, if this is not the case it rests with the physician to calm the fears of, & often to restore to tranquillity & happiness a whole family.

Diagnosis. Haemoptysis is to be discriminated by symptoms which precede the flow of blood. Those which accompany it. & Those which succeed it.

The symptoms which precede are a pain in the chest a sense of weight in the Lungs accompanied with dyspnoea, a tickling sensation about the glottis, a saltish taste in the mouth, & a haemorrhage of viscid phlegm, together with all these there is generally a febrile excitement, displayed by the flushing of the cheeks, a some heat in the thorax & an irritable pulse.

The accompanying signs are the blood being brought up by coughing, mixed with air bubbles, which give it a frothy appearance, its colour a light scarlet hue & a difficult breathing after expiring



to suffocation, the two also declines of any
existence.

If the discharge is considerable in quantity, the effects
upon the system will be considerable to wit against
the formation of the uterus. The
prostration which succeeds it is much greater
in proportion to the quantity of blood lost arises
immediately from the importance of the organ in
which the lesion takes place.

The physician is always to be sufficient to be able
to determine whether the discharge, from
the stomach constituting Hematemesis or from
the lungs, not to confuse it with perfect it is
necessary to take into consideration the symp-
toms of Hematemesis. In this disease the blood
expected is of a dark complexion & gummy in con-
sistence, it is to be mixed also with the contents of the
stomach brought up by vomiting; those subject to
Hematemesis are generally chlorotic females
or it is the consequence of some previous disease
such as inflammation of the stomach



or of several long preserved substances or her-
-ledge, of all these circumstances will a most
cases trace the practical & experimental
How, then, does the disease arise?

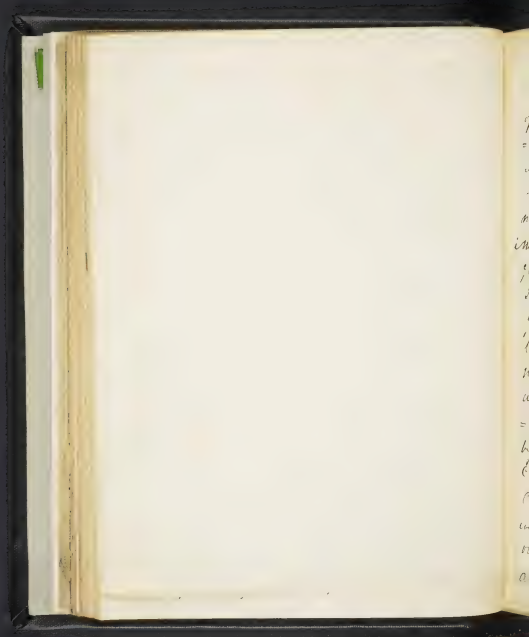
Causes—

These may be divided into Remote or predisposing
& exciting & Proximate causes.

The Remote causes are all habits, & structural
derangements, which tend to weaken the Support-
-render them incapable of supporting the immense
quantity of blood which is constantly flowing through
the system. These habits, are a sedentary, & studious
life, those employments which require a consid-
-erable degree of the same, such as for instance
as the weavers or the shoemakers trade, Plethora
frequent exposure to change of temperature, heat
-circulation of the blood, such as in a stove
-circulation, frequent attacks of cold, &
-temperate living. The structural derange-
-ments are tubercles, a contracted thorax—

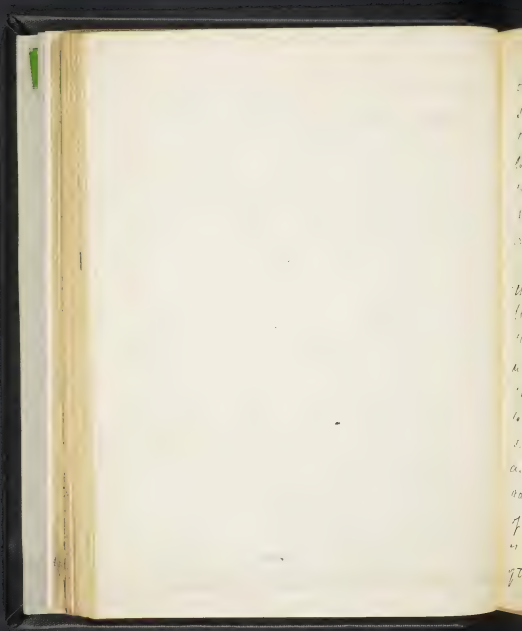
* Note. I know an instance of *Manistigies*, which I consider
very strongly, however, originally from a diseased state of the
Tongue. The *Lachrymatory* is not the cause, but the
irritation of the Tongue to such a degree, to produce the *Manistigies*.
The *Manistigies* is not the cause, but the *Manistigies* is the result
to an irritation of the Tongue.

And calcareous concretions. It is also produced
 by chronic diseases of the Liver, by Dyspepsia, -
 by drying up or stopping some accustomed
 discharge, such as an issue, a hæmorrhoidal
 flux long continued & Lencorrhœa by grip -
 & long continued mental anxiety &c
 Under the lead of exciting causes, may be con-
 sidered all impudences, and exposure
 to a draught of cold air whilst perspiring freely,
 a debauch, violent exertions, such as lifting
 heavy weights, straining to pull on a tight foot,
 running, violent motions of the mind &c. &c.
 a Sanguine temperament or a delicate & irritable
 constitution; a blow upon the thorax & arising
 suddenly, an accustomed hæmorrhage - A rare-
 fied Atmosphere will also produce it. Travellers,
 who have ascended high Mountains, inform us that
 that one of the disagreeable consequences attend-
 -ing such a step, is a gushing of blood from
 the nose & nostrils. This took place after



they had ascended so high above the surface of the earth, that a great diminution of the atmospheric pressure existed. The explanation of this phenomenon is one which can be based upon no certain data or demonstrable facts, & therefore the following remarks may be considered as a mere sporting of the ~~imagination~~ imagination, uncontrolled by reason & perhaps justly so.

It is a fact well established that the increase of vigor which we experience when exposed to a cold & dry atmosphere, is owing in some measure to the increase of atmospheric or atmospheric density, & consequently of atmospheric pressure. Our muscular fibres are by such an increase of density rendered more compact & of course invigorated. But on the contrary, that the languor & lassitude which we experience on a warm summer day is owing principally to an opposite state of the atmosphere. We may occasionally consider

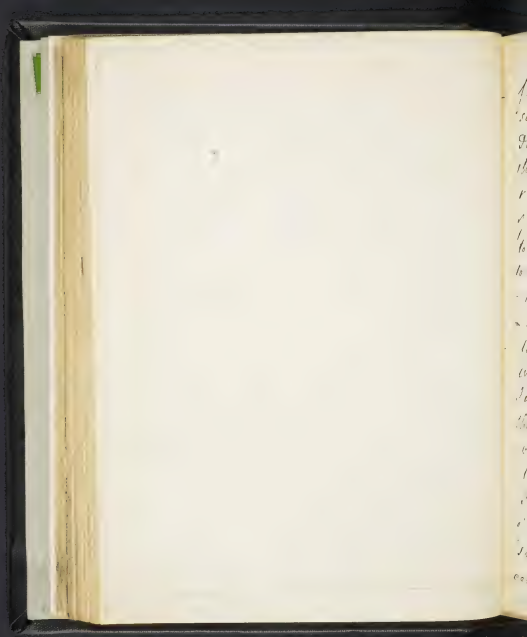


the vessels of exposed surfaces as partaking of the same invigoration & of the same relaxation under the opposite conditions of the air. The conclusion to be drawn from the foregoing remarks is that the vessels of those surfaces which may be considered solid, although exposed to the influence of the atmosphere are supported & their strength increased in proportion to the density of this element. This is proved by the additional force which the blood vessels acquire during cold weather. That on the contrary they experience a diminution of strength when the density of the air is diminished; this is evinced by the relaxation & debility they are subject to during warm weather. The effects of the rarefied state of the air upon the top of the Alps & Andes are of course the same as when this element is rarefied by heat only differing in degree. The strength of the vascular portions of the lungs & the heart & those, is therefore diminished in these high regions; the consequence of this the blood does not circulate through the organs

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with its former rapidity, congestion takes place & the blood receives the increased resist by forcing its way through the weakened & paralytic exhalents.

But there are other causes which from their extensive applications peculiarity of action deserve to be considered alone. These are Heat & Cold. It seems somewhat singular that principles so directly opposite should produce so similar effect, so similar but this is easily accounted for when we examine the nature of their operations. Heat when applied to a considerable degree produces first a stimulating impression upon the nerves, an increased activity of the circulation succeeds, the acceleration of the blood is manifest, every part of the system therefore is particularly experienced in the Lungs in as much as its delicate vessels have the blood determined towards them in a much greater quantity in a given time than formerly; the consequence of this increased



force is Effortless, Congestion, exuberant hemorrhage
 succeeding produced by this Congestion.

It has been supposed that heat acts by rarefying
 the blood. There can be very little doubt, that it
 does so, & that, on some occasions, to the diminution
 of density which the Air sustains when subjected
 to its action, but the idea that its operation is owing
 to a rarefaction of the blood is disproved by the expe-
 -riments of Sauvages, & Haller. These physiologists
 - enclosed a portion of blood in a thermometrical
 tube & found that at the temperature of boiling
 water it did not expand too the point of its bulb.
 I am therefore inclined to adopt the opinion of
 the celebrated Dr. Parr that heat acts by produ-
 -cing a relaxation of solids & diminishing resist-
 -ance.

The impression of Cold is directly opposite to that
 of heat, but its ultimate effects are precisely
 similar. When it is applied to the body it produces
 at first a centrifugal determination of blood

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from the surface to the central vessels, these -
 vessels are by this slightly enlarged, the lungs of
 course partaking of this enlargement; It operates
 also immediately upon the mucous lining of
 these vessels, relaxing it. It is combined
 with moisture & opens the sensibility of the
 exhalents or in other words relaxes & debilitates
 them, rendering them in this manner capable
 to resist the tendency which the heat has to force
 its way out of the enlarged vessels --

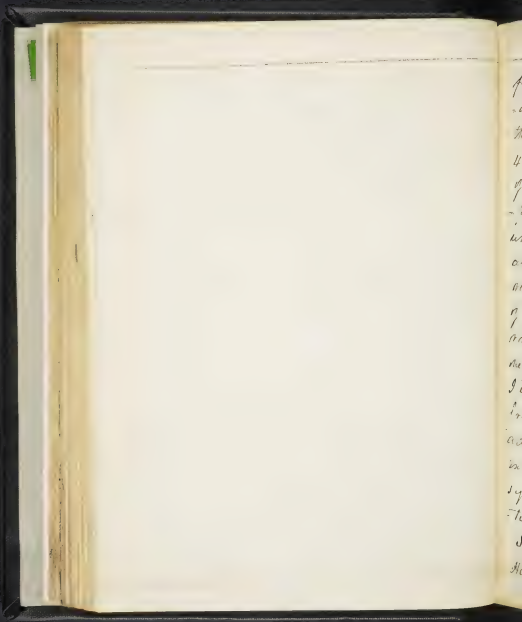
The Proximate cause of Haemoptysis is involved in
 considerable obscurity; An investigation which -
 has for its object the removal of this obscurity, -
 being dependent mainly upon more exactness
 in the subject in a state of doubt & un-
 certainty -

Authors enumerate four proximate causes, 1st Hemis
 or Rhe'thore 2^d Disruption or transudation of -
 Diabrosis or erosion 4th Anastomosis

That doctrine which inculcates that Resis and

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-Erosion are the most frequent causes of hemorrhage
 was for a long time almost universally, for several years,
 & in relation to it was considered as scepticism.
 unworthy of reputation. But more recent times
 have seen the establishment of the opinion which
 was so ably advocated by Bichat & which is taught
 by the able physician who occupies the Chair
 of the Institutes & Practice of Medicine in the
 University of Pennsylvania to his pupils -
 Bichat asserts that in no instance of spontaneous
 hemorrhage could he discover any disposition -
 the slightest appearance of erosion, although he
 meticulously washed the surfaces with the
 greatest care, & employed a microscope in exa-
 mining them. 2^d that in squeezing the mucous
 surface of the uterus in women who had died
 during menstruation he expressed a number
 of small drops of blood which manifestly
 came from the mouths of the exhalants -
 3^d that hemorrhage sometimes takes place



from free surfaces where the exhalents are evidently in fault. This renders it probable that the same thing occurs in mucous membranes.
 4th. that in active hemorrhage we admit of the probability of a rupture, how can we suppose it to take place in passive hemorrhage where the power of the vascular system is almost destroyed. 5th. that it is difficult to reconcile with the doctrine of rupture many of the phenomena of hemorrhage such as the rapidity with which it has disappeared in one part & reappeared in another.

I will now close these groups with a few lines from Lucan which are peculiarly striking & admirably express the fact, that blood may issue from every exhalent in the human system in cases of extreme debility & exhaustion.

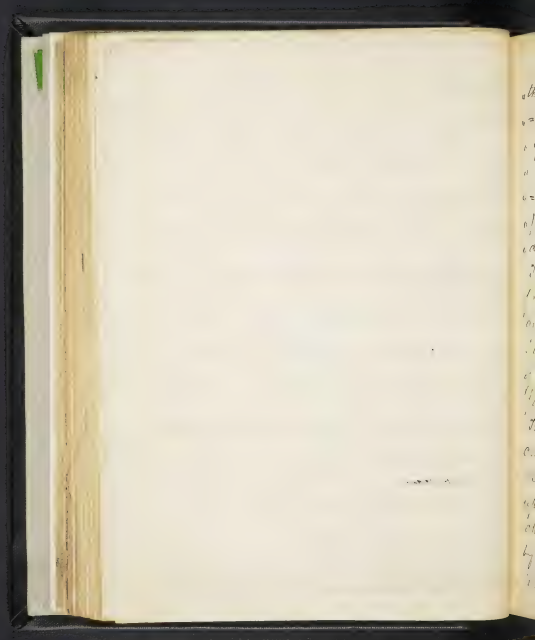
Sanguis exant lacrymas: quocunque foramina morit
 Humor, at his lacus manat: cunctos ora redundant

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Epistulae variorum: sudor multus: tumor pectoris
Mutatio humorum: color ruber in sanguine corpus
Reverat utrobque haemorrhagias Palmarum
et non potest occurrere.

It is a remarkable fact & one which has been much en-
 -raged the attention of Physicians, that *Hæmoptoe*
 is very much inclined to make its appearance at the
 crisis of life, when a change from boyhood to manhood
 is taking place; which period is denominated Puberty.
 This change has been the cause of much speculation
 & has been a theme upon which the imagination
 has enjoyed untrammelled license. The relation to *Hæ-*
moptoe is attributed to plethora which very frequen-
 -tly exists at puberty. The least occurrence of
 a catarrhic condition at this period has occasioned
 much theorising - but I shall only mention one
 of the theories which have been advanced & this is
 Becquaer's.

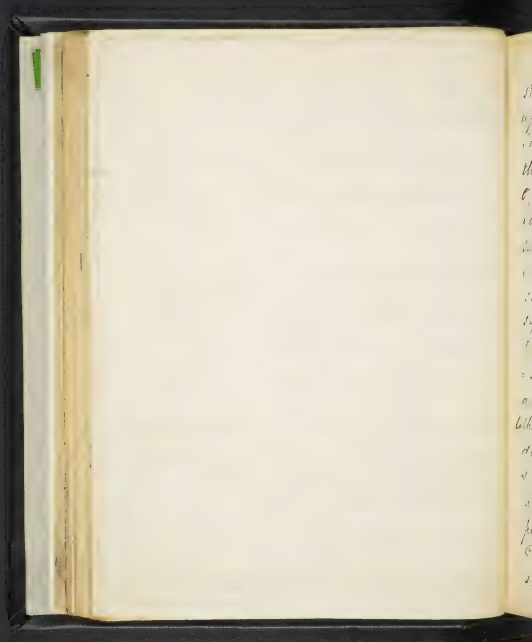
This author observes, as the Lungs are connected
 in an intimate though unknown manner with



"the genital organs, they acquire with them a pre-
 "dominance at puberty, & partake of the increase
 "of vital energy which they require at this period:-
 "It is at this time that pulmonary affections com-
 "mence; as those cases which in an adult would
 "produce gastric affections, or general pulmonary
 "diseases.

The imposing effect which every observation coming
 from one so distinguished produces gives to this opinion
 an authority which few will venture to object to, but
 I am induced to accept it not by this effect, but on account
 of the applicability of his ideas in explaining the
 facts now under consideration.

That the genital organs have an intimate sympathetic
 connection with the thoracic contents, is proved by
 the effects which a development of these organs have
 upon the trachea; the expansion & enlargement of the
 chest & trachea at the period of the development; and
 by the enlargement of the trachea in females at
 puberty, but more particularly at a certain -

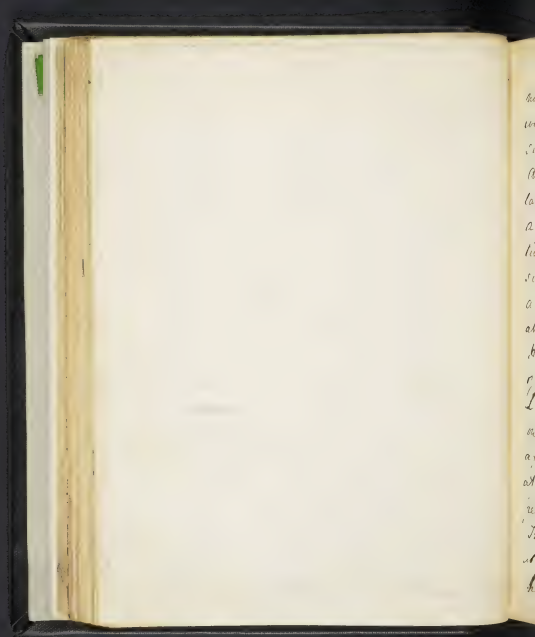


Stage of pregnancy, or when the period of parturition approaches.

It is probable that the uterus & excites the system to new greatly increased action. Of this invigoration the blood vessels must of course largely partake. The movements & exertions which the act may be of tend to proportion to the strength & the delicate vessels of the lungs, which from their situation with regard to the rest of the circulating system, the duties they perform, must sustain.

The greater labor of the breathing under these circumstances. The enlargement which the chest is undergoing at this period involves also a greater proportion of blood to them than usual; there is a cause of morbid dilatation the vessels of the lungs, & engorgement, & finally, hæmorrhage.

With regard to the fact that hæmoptoe is apt to occur periodically it is proper that I should here say something. Cullen in his First Lines observes that hæmorrhage sometimes takes place at stated periods. Dr Mead

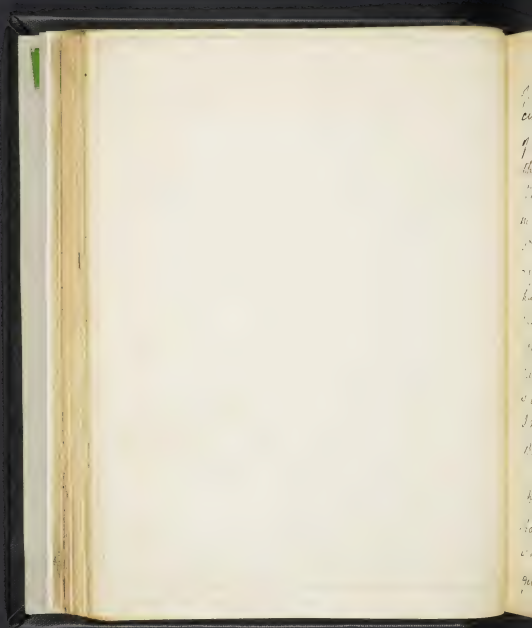


noticed the same fact but it is from Drosely that we derive the most decisive information upon this subject.

Among the many instances says the Dr which I have lately seen there is one which deserves to be recorded. A man in Burlington Street has a cough for some time which brought on hæmoptoe. The cough increased six weeks & finally degenerated into a regular monthly eruption of blood. Heeding a pur about 8 ounces of blood every full moon.

He also relates the case of a Captain Richard Byles of the 3^d Regiment of Guards who was attacked in London on the 20th of January from staining to pull on a coat. He had many recidives of the attack after recovering from the first. These attacks became at last so periodical as to return it or near the period of every full moon.

This case tends to justify also the view which Dr Drosely advances viz that the moon has considerable influence on hæmoptoe. We may account it is true for some



of the repetition by supposing that fortuitous circumstances combined to produce them at the period of full moon; but such a number of occurrences at this particular ^{time} cannot in this way be explained. There is another circumstance which may be related in this place.

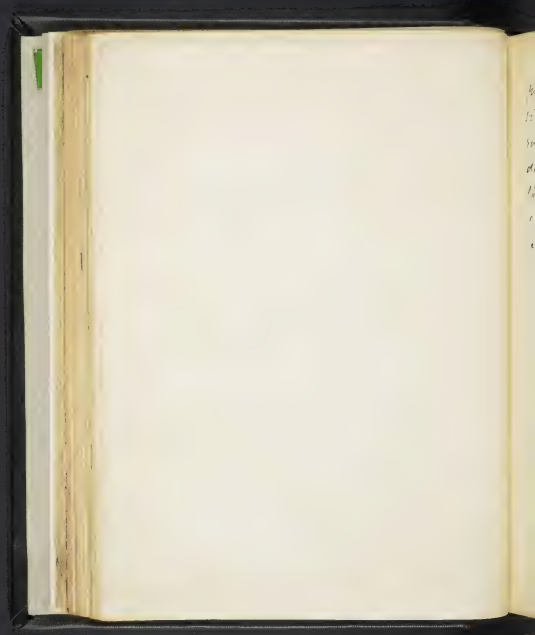
Dr. Anna Davis, M.D. had the opportunity of visiting a variety of patients, first, 'attacks after the return has taken place in the deersfoot, when a perfect set both of body & mind prevails. Three out of four cases which are known to my wife took place at this time. One of them was fatal by stramonium & another of them was the precursor of a disease, which I have good reason to suppose was inflammation of the Bronchus, then destroyed the patient by producing effusion.

Prognosis -

It is very difficult to form a prognosis with regard to Long'syia, as the more material circumstances which could afford a criterion do not usually occur. As generally, until I am furnished with occurrences

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The most hæmorrhage, & very rarely, occurs, though this is occasionally the result of it. The physician cannot in most cases form a prognosis from the first hæmorrhage, for although circumstances may be favourable at first, time, & unforeseen occurrences, frequently destroy the most prospect, & vice versa. The following considerations, however, may determine our prognosis: If the patient has an hereditary predisposition to Phthisis pulmonalis; a Scrophulous diathesis, evinced by a fair complexion, thick lips, mild blue eyes, & light complexion, & hair, or a defective chest, the prognosis is very unfavourable. If the hæmorrhage returns frequently, & is succeeded by a cough with a spitting of blood, & a constant pain in one part of the Lungs, we may determine that Phthisis pulmonalis has ensued. If the disease occurs in an emaciated & cachectic person, the prognosis is very unfavourable; the hæmorrhage itself may in this case be fatal. The most favourable prognosis is the disappearance of the cough, pain, & dyspnoea. The discharging



produced by some entirely accidental cause. It being
 so common & occurring in a constitution which we have
 every reason to believe is tainted by a scrofulous
 diathesis. The habits of the patient in question. All
 these circumstances taken into consideration will
 generally enable us to judge of the most proper
 treatment.

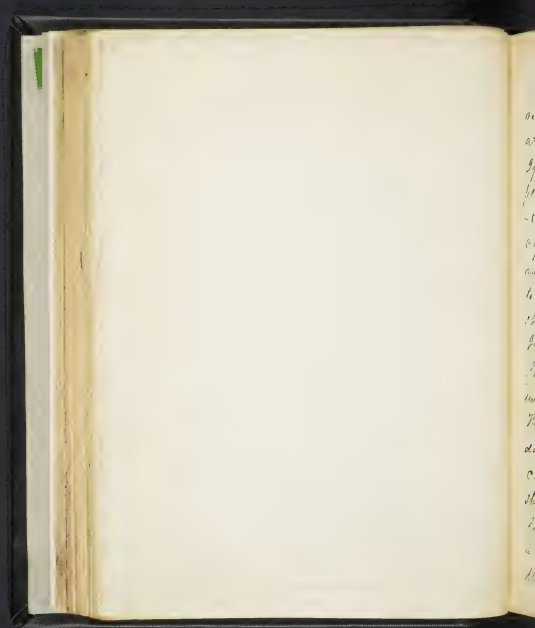
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This resolves itself into two divisions - 1st -
 1st the treatment proper during the hæmorrhage -
 2^d that which is required after it has been arrested
 = to

When we are called to see a patient who is attacked
 with hæmoptysis, if this is a tall violent irascible
 blood flowing from his mouth his respiration obstructed, &
 his pulse greatly accelerated, he complains also
 of something which feels like a load upon his lungs.
 If he has action to rest & the extravasation occurs whilst
 he is asleep which it most generally does, he is
 = aroused by pain & oppression in the Thorax & expe-
 riences also a tickling sensation about the fauces.
 This brings on a coughing, by which the blood is cleared

go -

The attack is often strictly febrile in its nature.
 It is ushered in by a chill, accompanied with cold
 extremities, lassitude, & debility. This is succeeded
 by a fever together with its effect upon the system
 generally. The paroxysm is completed by the effusion



flow, which may be considered as bearing the same relationship to the preceding stages as the sweating at the closing and intermitting paroxysm.

If we see the patient before the catarrh has taken place & from the symptoms have reasons to suspect a determination to the chest, the obvious indication is to bleed copiously. It is necessary also if the local symptoms are very threatening, to apply cups to the chest, which are to be repeated if required, or a blister substituted. The bowels should be attended to, & kept freely open by saline cathartics. If the discharge of blood has occurred before a crisis, the first step must be to arrest it. The most important remedy under such circumstances is bleeding from the arm.

The celebrated Helman from a private consideration doubts the propriety of the practice not long, & as to conceive how opening a drain, whilst the already exsiccated should arrest it is lost. But the fact is explained in the following extract from Dr. Chapin's Lectures. "By opening a vein in the arm (says the Dr) we make an afflux of blood to that part, on the principle of venous check

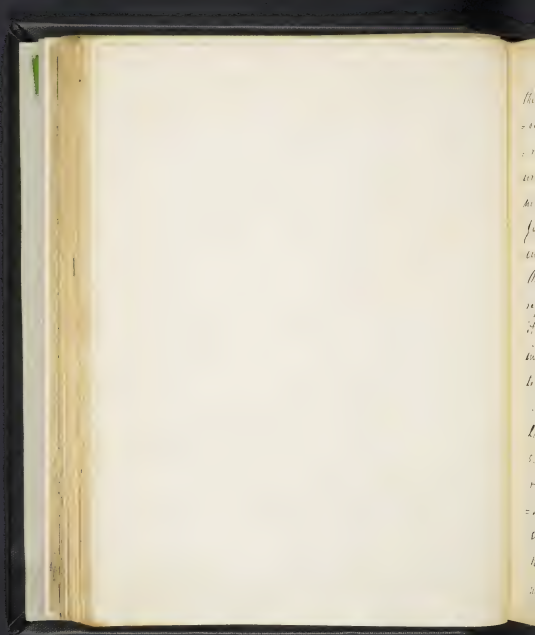
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the hemorrhage in any other part; he concludes with observing that the solution of the problem is perfectly immaterial, the fact being almost universally correct. In the more violent cases, it is essential that the bleeding be copious, the tendency which the blood has to the lungs not being overcome by any other than a more powerful attraction in another direction. Small bleedings, says Dr. Chap. only serve to harrow & debilitate the patient without contributing to the cure. My practice (he continues) in cases where it is necessary to afford immediate relief, is to take at once from a large surface as much blood as to produce a permanent impression. Cupping-salts may be used advantageously at this time. The more of its action is vigorous, but it operates probably by stimulating it. The use of Phlogon & producing a determination to various other parts. The mode of using it is a matter of some importance as its effects are influenced by it. It is to be used as follows a teaspoonful of the dry salt is to be taken into the mouth in small portions, dissolved upon the tongue & afterwards swallowed —

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blisters to the chest are highly re-
 commended; indeed there is very little doubt
 that they are important auxiliaries in
 arresting the flow of sanguinous fluid -
 "As a blister (says Dr Parr) will often prevent, & it
 will sometimes lessen Pulmonary hemorrhage & is
 indeed a very unequivocal remedy. Practitioners disagree
 very much as to part to which they ought to be applied,
 some contending that the extremities are the proper
 situations for their application; others, they, will
 a little spirit, rub, place upon the chest.
 This latter opinion is the one which has been generally
 adopted. Indeed it may be laid down as a general
 rule that in all local diseases where blisters are
 indicated, we should apply them as near to the seat
 of the disease as possible. It is only in general affections
 that we can apply them with propriety to the entire
 - surface.

Cold applications to the Thorax have also been high-
 -ly recommended, but I should doubt the propriety of



this use, except in urgent cases. Cold is very dangerous to discover lungs, & therefore should be used sparingly & cautiously. It has indeed been advised to wrap the whole body in a sheet wet with cold water in extreme cases. Such bold practice is perhaps justifiable under these circumstances but only - under these circumstances.

Many, years ago *Saccharum Saturni* was a popular reputation in the complaint & was generally used it being presumed that its relaxing effect when taken into the stomach would extend to the Lungs. But owing to the reports of Sir Geo. Baker, it was afterwards viewed as a deadly poison & its use abandoned. The late Dr. Watson by stating to the public the result of his experience & giving his distinguished authority with regard to the propriety of its use succeeded in dissuading these idle notions in this country & fully established ^{its} ~~the~~ use.

But in consequence of this its use has become perhaps too indiscriminate; Physicians employing it upon all occasions.

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& frequently without any attention to the condition of
 the system. Bleeding should always precede the use of an
 excited condition of the vascular system. Dr. Chapin
 observes upon this subject that if the force of the Arteries
 is not previously reduced, Bleed will not only be ineffi-
 cacious but even injurious; nor will a single bleeding
 answer it is the common practice to bleed as long as any
 arterial excitement exists. After this has been reduced
 Bleed may be administered. It cannot be considered
 applicable as long as the bleeding is profuse. It
 would indeed, be idle to use it under such circumstan-
 ces. *Saccharum Saturni* may be taken in considerable
 doses without injury. A scruple of it has been swallowed
 by mistake without producing any other effect than
 an active purgative.

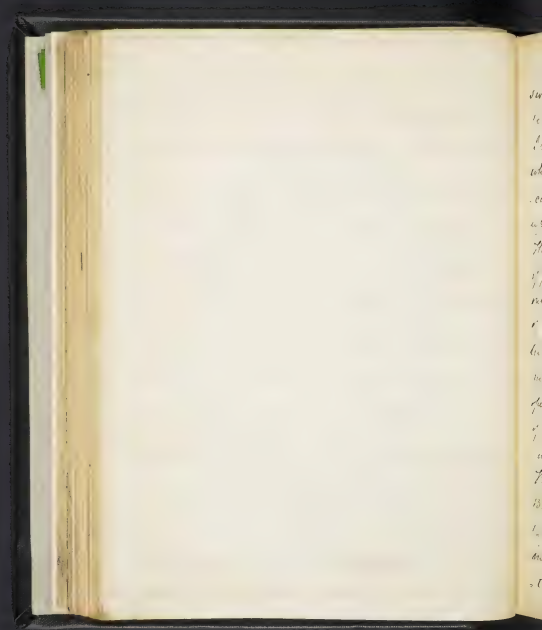
Alum has been much prescribed & commencing its
 powerful astringent properties, one would suppose
 a person that is a very valuable remedy. But I have
 been taught to put but little confidence in its powers,
 in this species of hemorrhage. It is certainly not

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applicable to profuse hæmorrhage & it is therefore
if ever at all only to be given in the milder cases;
or to more severe ones after the bleeding has been considerably
diminished by more active remedies.

For a long course of time Digitalis suffragated whole
as a remedy in this affection. But its efficacy is not now
much dependent upon. Its effects are obtained in most
cases either by giving a considerable quantity in small
doses frequently repeated or by a large dose administered
at once. In the first case it requires a considerable
time to put the system under its influence, & in the
latter we may destroy its power. It is therefore not
to be used in an affection which requires prompt relief.
The opinion which prevails, that it may be used as a
substitute for the lancet is injurious. There is nothing
in fact which can be substituted for this instrument
when reduction of the arterial force is required. It is
-ministered it is to be given in small doses.

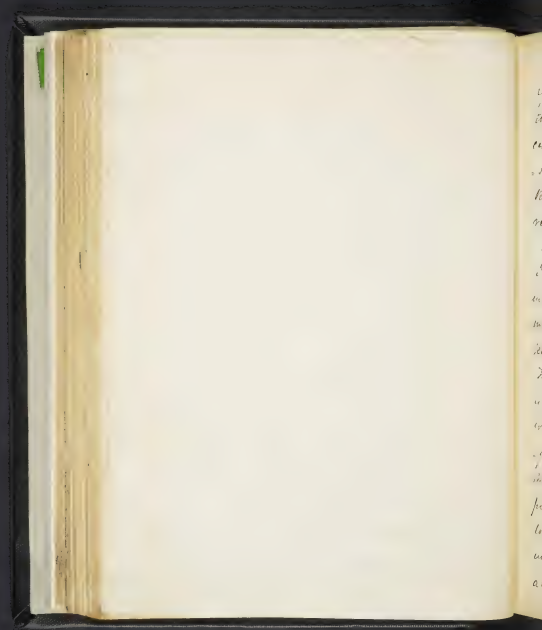
Nitro has been commended with a view to its refrigerant
effects. By Dr Parr it is said to be most effectual when



Swallowed in cold water, whilst dissolving. Ten grains may be given 5 or 6 times in this manner in urgent cases.

I have now ^{arrived} at the consideration of a class of remedies, about which there is considerable dispute viz. Emetics. The efficacy of these medicines depends principally I suspect upon the nature of the case in which they are used.

They cannot be considered as proper in the generality of profuse bleedings from the Lungs. In such they ought only to be used as dernier resorts. But when the quantity of blood is not small in quantity and seems to proceed from the Bronchial Arteries, they prove to be ^{useful} ~~useful~~ with great advantage. Their operation in such cases tends to restore the equilibrium of the circulation by determining to the surface, & clearing the membranes & procuring a free perspiration. Their efficacy in all cases was strongly advocated by Dr B. Robinson of Dublin. Cullen was induced to try them, but conceiving that they greatly increased the discharge in one instance, ~~and~~ ^{and} endangering the life of the patient, he has then since proscribed them entirely.



It although Emetic Sulph. Tartar is inadmisible in the more violent cases on does long enough to vomit, it is certainly very usefull when given so as to procure its nauseating effects.

By Dr. Ferri, the vitriolic solution has been strongly recommended. In this practice he is supported by Dr. Barthez, who thought the remedy very efficacious.

I have been taught to consider *Hypocyanura* as an article in which emersion is to be placed. It is to be administered in small doses so as to produce nausea which should be kept up for some time.

The mineral acids have also been used. The best of them is the sulphuric acid, given on the dose of 10 or 20 drops with a proper proportion of water, every hour. Its local effects may be derived from the Elixir Vitrioli. Most of the Narcotics have also been used with a view to procure their sedative effects. But Verum may be said to supply the place of all the rest of this class. The utility of this medicine in many instances is too well attested to admit of a doubt. Criticisably a stimulant

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it might very properly be considered as contraindicated, did not
 experience bear testimony of its salutary operation. Dr
 Chapman remarks that in a recumbent position this article
 we should bear in mind the peculiarity of its effects.
 "When I have directed Opium (continued He) it has
 generally been in cases where great pulmonary exci-
 -tation existed, accompanied with a cough. No one
 could dispute the propriety of using Opium in such
 circumstances there may be great arterial excitement at
 the time. Irritation of the lungs: can prevent only the
 cough has the effect of continuing the hemorrhage & by
 moving them we arrest it.

There are some general indications with regard to
 the management of the patient which must be answered.
 I shall make an extract of these from Dr. Chapm.
 Lecture on Consumption.

"¹ The moment you are consulted in a case of this na-
 -ture, you are to direct that your patient be put in
 a state of complete rest with his shoulders somewhat
 elevated. ² the room should be kept cool & well ventilated.

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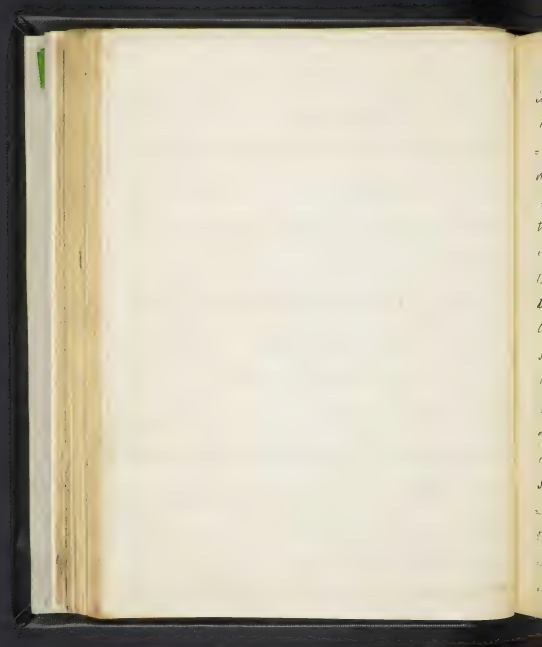
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This is a matter of great importance. It is also proper that
 company be excluded, & the patient must not even be suffered
 to enquire into any event that may occur, the nurse asking
 a question has been known to excite a return of the haemorrhage.
 3^d The diet should consist of small portions of
 demulcent drinks. It is especially necessary that the
 stomach should not be overladen with aliment or drink.
 4th It is a matter of considerable importance that the bowels
 be kept in a soluble state. But no great advantage
 would result from active purging. In administering pur-
 gatives we must be careful not to excite haemorrhage,
 as it is very apt to excite coughing & thus produce a recurrence
 of the bleeding.

Most of the bleeding from the lungs which are called
 are of an active nature. But we occasionally meet with
 cases of an opposite kind, requiring a treatment very dif-
 ferent. These are denominated passive haemorrhages.
 All such cases are to be treated alike whether they
 are primarily or secondarily of a passive nature.

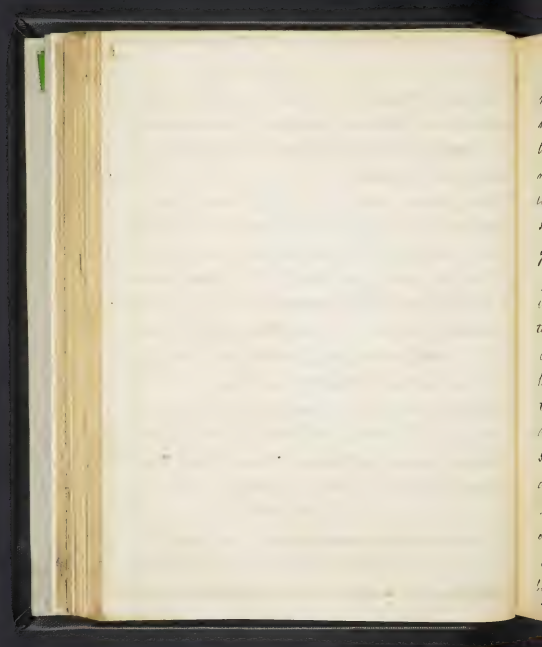
Tonic are of course to be freely used. Of these the Bark



is certainly the best. Dr. Chapm. observes that the best mode of smothering this tunic is to combine it with some chloride. Of these he prefers the Muric acid tincture of Iron or the green sulphate.

The vegetable astringents are of so little use, require that it is not necessary to dwell on their administration. I have now finished the consideration of the means to be employed during the hæmorrhage. I am next to speak of their proper after this has been arrested, and although there are much fewer in number & dissimilar in their characters, yet they are, perhaps, less important than the preceding.

The object of these remedies is to prevent a recurrence of the disease & consequently, to arrest this inevitable advance towards pulmonary Consumption. As a sanguine & vitæ state of the system is very inimical to our efforts. We should therefore enforce the Antiphlogistic regimen in all its rigour & bid the patient to adhere to it most rigidly. The best efforts of the physician & the most unremitting attention



his part is frequently renewed arising by a single
 impression on the part of the patient? In a short
 time after the attack has occurred we find him to
 regain his confidence & spirits, & under these circumstances
 believing that he is perfectly cured, he is very apt -
 secretly to depart from our regulations. We should
 guard him in the most unperceptive manner from this
 fatal security, & convince him that his life depends
 upon his strictly complying with our directions with regard
 to diet, clothing &c. The diet should consist of the lightest
 article & the patient must not even be suffered to load
 his stomach with them. Animal food must for some-
 time be totally abjured. He should wear flannel
 next the skin. And his bowels should be kept open.
 He should particularly avoid exposure to the bright
 air. It is important that he should exercise on
 horseback but must not carry it to such an extent
 as to fatigue himself. His ride must be commen-
 ced in the morning after sunrise & in the evening
 before sunset so as to avoid both the oppressive heat

of the Sun, & the damp air of twilight. He must
 as in a hot fire or a room where the air is very much
 rarefied by heat. In fine nature must not be ob-
 structed in her restorative operation, by any
 impudent acts; as his safety depends entirely -
 upon a due regard to the condition of his system, & a firm
 resolution to abide by the treatment this condition
 calls for.

Finis

